AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 6. This sheet replaces the original sheet including Fig. 6. In Fig. 6, the legend of the box 63b, which had been labeled --STORAGE APPARATUS--, has been changed to "CONTROLLER". See page 18, lines 20-26 of the specification for support of the change in the label for box 63b.

Attachments: Replacement Sheet (Fig. 6)

REMARKS

Claims 7, 9-11, 14-17, 19 and 21-28 are pending in this application. New claims 21-28 have been added. Claims 7, 9-11 and 14-17 have been amended. No new matter has been added.

Claim Rejections under 35 U.S.C. §102

Claims 7, 9-11, 14-17 and 19 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,483,649 to Kuznetsov et al. Applicants request reconsideration of the rejection for the following reasons.

Support for the invention as claimed is provided in the specification with respect to the second embodiment of the invention. The description of the second embodiment of the invention begins at page 16, line 25 and is described with reference to Figure 6. As shown in Figure 6, the storage apparatus 60B has a duplication area 67 for storing replicated volumes duplicated from the storage volume 64 of storage apparatus 68. See page 17, lines 6-10 of the specification. As pointed out in the specification, the storage volume 64 and in the replicated volume 67 may exist in the same storage apparatus, and further more than one replicated volume 67 may exist. See page 17, lines 19-25. In the second embodiment of the invention, the data protection unit 74 instructs the controller 63A or the controller 63B to cancel or temporarily stop the replication relation between the storage volume 64 and the replicated volume 67 when an intrusion detection unit or virus detection unit notifies the computer fraud receiving unit of the detection of computer fraud. See page 18, lines 1-5 of the specification.

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Response to Office Action mailed August 14, 2006

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Independent claims 7, 10, 11 and 14 have been amended to more clearly describe the features of the invention. In particular, each of the claims has been amended to set forth that the data transfer operation being claimed is a data replication process and that the "data replication" is from a first volume to a said second volume that is a pair of the first volume. Further, independent claims 7 and 14 now set forth that the replication stopping unit instructs the storage control unit to stop data replication from the first volume to the second volume, which is the pair of the first volume, when the event detection unit receives detection of illegal intrusion (claim 7) or detects an event (claim 14). Claims 10 and 11 have been amended to include in the instructing limitation that the storage control unit is instructed to stop data replication from the first volume to the second volume that is the pair of the first volume, when the intrusion is detected. Accordingly, each of the independent claims includes the feature of stopping replication of data from the primary volume to the secondary volume, which is the pair of the primary volume, when an event or an intrusion is detected.

Kuznetsov discloses the duplication of a primary volume (Fig. 9, item 32, which is the hard disk) to a replicated volume (Fig. 9, items 122, 126), as well as a protection-program support module 120B that protects files on a personal computer from inadvertent or intentional distortion. The first memory 122 stores the protection programs 120A. The second memory 126 is used to store the different versions of the key program, which is capable of changing the state of the PPSM 120B. *See*, col. 13, line 65 to col. 14, line 6 of Kuznetsov. The module 120B blocks access paths to a hard disk controller 30, which controls hard disk 32, when "dangerous requests" are detected. Applicants have taken the

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position that items 32 and 122, 126 of Kuznetsov are not equivalent to the claimed first and second storage volumes, particularly because memories 122, 126 do not constitute a second volume that receives replication data from a first volume wherein the second volume is a pair of the first volume, as claimed. Further, memories 122, 126 do not store data received from the host computer as in the present invention.

In the present invention, the claimed first and second volumes have a relationship in which the data is replicated from the first volume to a second volume that is the pair of the first volume. Further, the replication stopping unit, as set forth in independent claims 7 and 14, stops the storage control unit from replicating data from the first volume to the second volume when an event is received or detected by the event detection unit. Further, in independent claims 10 and 11, the storage control unit is instructed to stop data replication from the first volume to the second volume when an intrusion is detected. In each of the independent claims, therefore, data replication from one volume to another volume that is the pair of the first volume is claimed in combination with stopping replication of data from the primary volume to the secondary volume, which is the pair of the primary volume, when an event or an intrusion is detected, which is not disclosed or suggested by Kuznetsov. Accordingly, Applicants request reconsideration of the 35 U.S.C. § 102(b) rejection for the foregoing reasons.

New Claims

New dependent claims 21-28 have been added. Claims 21, 23, 25 and 27 include

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canceling data replication. The specification discloses that in the second embodiment, the

data protection unit 74 instructs the controller 63a or the controller 63b through the port 71

and the SVP 62a or the SVP 62b to cancel or temporarily stop the replication relation (data

reflection) between the storage volume 64 and the replicated volume 67. See page 18, lines

20-26 of the specification.

Claims 22, 24, 26 and 28 include instructing the storage control unit to stop

communication between the host computer and the storage system, when an event or an

intrusion is detected. See the paragraph bridging pages 10 and 11 of the specification, with

respect to the first embodiment of the invention and the discussion in the specification that in

the second embodiment of the invention, the operation is similar to the first embodiment with

respect to the data protection unit 74 instructing the switch 50 or the SVP 62a to change the

configuration so as to disconnect the back-end path between the host 40 and the storage

volume 64, and in addition cancel or temporarily stop the replication relation (data reflection)

between the storage volume 64 and the replicated volume 67. See page 18, lines 18-21

thereof.

Accordingly, proper support is provided for new claims 21-28.

Request for Interview

Applicants request that the Examiner grant an Interview with the undersigned attorney
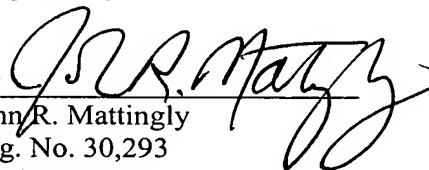
when the Amendment has been assigned for examination.

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Conclusion

In view of the foregoing, Applicants respectfully request that a timely Notice of

Allowance be issued in this case.

Respectfully submitted,

By _____
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FIG.6